

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. -146. (Cancelled)

147. (Currently amended) A radioactively labeled compound analog of a fatty acid that ~~is~~ can be taken up by mammalian tissue, ~~comprising the formula wherein~~ the compound is selected from the group consisting of:

[<sup>18</sup>F]-9-fluoro-3,4-cyclopropylheptadecanoic acid;

[<sup>18</sup>F]-9-fluoro-3,4-cyclobutylheptadecanoic acid;

[<sup>18</sup>F]-9-fluoro-3,4-cyclopentylheptadecanoic acid ;

[<sup>18</sup>F]-17-(4-fluorophenyl)-3,4-cyclopropyl-heptadecanoic acid; ~~or~~ and

[<sup>18</sup>F]-17-(4-fluorophenyl)-3,4-cyclobutyl-heptadecanoic acid.

148. (Currently amended) The radioactively labeled ~~analog of a fatty acid~~ compound of claim 147, wherein said ~~analog~~ compound is metabolically trapped in said tissue by permitting the occurrence of ~~the~~ a first beta-oxidation step in which ~~the~~ a carbon atom to which ~~said~~ a substituent is bonded is beta to the carboxyl carbon atom, while preventing ~~the~~ the cleaving off from said ~~analog~~ compound of ~~the~~ the two carbon atoms to the right of the carbon atom to which said substituent is bonded.

149. (Currently amended) The radioactively labeled ~~analog of a fatty acid~~ compound of claim 147, wherein said tissue is heart tissue.

150. (Currently amended) The radioactively labeled ~~analog of a fatty acid~~ compound of claim 147, wherein said ~~analog~~ compound emits detectable positrons after being taken up by said tissue.

151. (Currently amended) The radioactively labeled ~~analog~~compound of claim 147, wherein ~~said~~an organic substituent reduces metabolic hydroxylation of said ~~analog~~compound.

152. – 153. (Cancelled)

154. (New) The compound [ $^{18}\text{F}$ ]-9-fluoro-3,4-cyclopropylheptadecanoic acid.

155. (New) A pharmaceutical composition comprising a radioactively labeled compound of claim 147 and a pharmaceutically acceptable carrier.

156. (New) The pharmaceutical composition of claim 155, wherein the pharmaceutically acceptable carrier comprises salts or electrolytes.

157. (New) The pharmaceutical composition of claim 155, wherein the pharmaceutically acceptable carrier comprises saline.

158. (New) A pharmaceutical composition comprising [ $^{18}\text{F}$ ]-9-fluoro-3,4-cyclopropylheptadecanoic acid and a pharmaceutically acceptable carrier.

159. (New) The pharmaceutical composition of claim 158, wherein the pharmaceutically acceptable carrier comprises salts or electrolytes.

160. (New) The pharmaceutical composition of claim 158, wherein the pharmaceutically acceptable carrier comprises saline.